

REMARKS

Applicants appreciate the detailed examination evidenced by the Office Action dated February 18, 2009. In response, Applicants respectfully cancel Claims 2 and 44, amend Claims 1 and 41 and request reconsideration of presently pending Claims 1, 3-43 and 45-51 based on the following remarks. Applicants respectfully submit that the claims as presented are patentable over the cited reference and are in condition for allowance for at least the following reasons.

Claims 1-52 Satisfy 35 U.S.C. §112, second paragraph

The Office Action continues to reject Claims 1-52 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (Office Action, page 3.) Specifically, the Office Action rejection is based on the use of the term "and/or" in the claims. Applicants respectfully submit that the term "and/or" is a well-defined logical construct of an alternative expression and that alternate expressions are expressly sanctioned by MPEP §2173.01. Accordingly, this recitation is not indefinite. Indeed, a word search of the USPTO Patent Full-text and Image database indicates that over one hundred forty thousand (140,000+) patents include the term "and/or" in their claims. Accordingly, this term is widely used in claims and is not indefinite. Applicants therefore respectfully request withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

In response to Applicants arguments, the Office Action states that it is not clear what is meant by the use of the "and/or" terms in the claimed limitations. (Office Action, page 2.) Applicants respectfully submit that well-established law provides that a term is only indefinite if one skilled in the relevant art would not understand what is claimed even when the claim is read in light of the specification. (*See, e.g., Rhone-Poulenc Agrochime, S.A. v. Biagro Western Sales, Inc.*, 35 U.S.P.Q.2d 1203, 1205, 1994 WL 858049 (E.D. Cal. 1994).) In the present case, the term "and/or" is a conventional alternative expression that is frequently used in patent claims and thus readily comprehensible by one of skill in the art.

Additionally, Applicants submit that a recitation "element 1 and/or element 2" is logically no different from a recitation "at least one of element 1 or element 2," which also represents conventional and definite claim language. Both recitations are inclusive

alternative expressions. Accordingly, Applicants respectfully request reconsideration and withdrawal of the Section 112 rejections.

Independent Claims 1, 33, 41 and 47 are patentable

The Office Action rejects Claims 1-52 under 35 U.S.C. §103 as being unpatentable over U.S. Published Patent Application No. 2005/0010638 to Richardson et al. ("Richardson") in view of DSL Evolution-Architecture Requirements for the Support of QoS Enabled IP Services, Revision 8 ("DSL Evolution"). (Office Action, page 4.)

Claim 1

Applicants respectfully submit that Claim 1, as amended, is patentable for at least the reason that Richardson and DSL Evolution, alone or in combination, do not disclose or suggest several of the recitations therein. For example, Claim 1, as amended, recites:

A videoconferencing method using Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) that provides end-to-end transport between an Application Service Provider (ASP) and Customer Premises Equipment (CPE), the method comprising:
receiving, by the ASP, a request for a videoconference designating a plurality of participants from one of the plurality of participants;
requesting capabilities associated with at least one of the participants from the RAN;
selecting a desired QoS and/or bandwidth allocation based on the capabilities;
requesting, by the ASP, the desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one Application Programming Interface (API) call responsive to the received request for a videoconference; and
activating the videoconference for the plurality of participants using the desired QoS and/or bandwidth allocation,
wherein the API includes an Application-to-Network Interface (ANI) that is defined between the RAN and the ASP. (*Emphasis added.*)

In rejecting Claim 1, the Office Action states that Richardson discloses:

requesting, by the ASP (i.e. videoconference server), a desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one call (i.e. policy server including policy information for a requested videoconference session) responsive to the received request for a videoconference (section 0067-0068; 0103; 0138; 0201; 0205-0206).

(Office Action, pages 4-5.) Applicants respectfully submit that the cited portions of Richardson do not disclose or suggest "requesting, by the ASP, a desired QoS and/or bandwidth allocation for the videoconference...from the RAN," as recited in Claim 1.

For example, paragraphs 0067-0068 appear to describe a network architecture database that may be used by a videoconference server to "effectively manage the bandwidth and quality of service." (Richardson, paragraph 0067.) Paragraph 0103 describes that the server "checks the policy on videoconference sessions on the WAN." Paragraph 0138 describes a user interface in the videoconference client application and a messaging system that specifies communication between the server and the other client's applications. In paragraph 0201, Richardson describes that the client application queries the server for a list of available candidates. In paragraphs 0205-0206, Richardson describes a user interface and messaging system "that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference controlling client or network."

Accordingly, Applicants respectfully submit that the cited portions of Richardson, as described above, appear to be wholly silent regarding a request by the ASP from the RAN. Accordingly, in contrast with the Office Action allegation, Richardson does not disclose or suggest "requesting, by the ASP, a desired QoS and/or bandwidth allocation for the videoconference...from the RAN," as recited in Claim 1.

Additionally, Claim 1 is amended to include the recitations of dependent Claim 2, which is canceled herein. In rejecting Claim 2, the Office Action states "please see (Richardson: section 0205-0206; DSL Evolution: Section 2.2, page 4; Section 4.2.2.2, page 12; Section 7.1, page 35)." (Office Action, page 6.) Applicants respectfully submit that the cited portions of Richardson and DSL Evolution do not disclose or suggest "requesting capabilities associated with at least one of the participants from the RAN; selecting a desired QoS and/or bandwidth allocation based on the capabilities," as recited in Claim 1, as amended.

As discussed above, Richardson, at paragraphs 0205-0206, describes a user interface and messaging system "that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference controlling client or network." Additionally, paragraph 0206 of Richardson describes a videoconference session controller who "will have control of which users will transmit in high resolution and which

users will transmit in low resolution" and that the "session controller may be the initiator of the videoconference session or some other person." Thus, the cited portion of Richardson is silent as to "requesting capabilities associated with at least one of the participants from the RAN," as recited in Claim 1, as amended.

DSL Evolution generally provides a common deployment architecture that appears to be focused on the network or transport layer and thus lacks the higher-layer framework that can be used by application service providers (ASP) to develop applications. In this regard, DSL Evolution does not provide the teachings alleged by the Office Action, except in terms of requirements. For example, Section 2.2 at page 4 appears to describe what will be required for new services and that "subscribers will be provided mechanisms for requesting these new services and indicating specific needs." DSL Evolution at Section 4.2.2.2, page 12 describes communication protocols and their application in various network layers. DSL Evolution at Section 7.1, page 35, appears to describe additional details needed per service provider under management systems for the proposed architecture and lists minimum bandwidth needed and minimum QoS level as examples. Thus, Applicants note that none of the cited portions disclose what is alleged in the Office Action.

Accordingly, Applicants respectfully submit that the cited portions of Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "requesting capabilities associated with at least one of the participants from the RAN," as recited in Claim 1, as amended. Applicants respectfully submit that Claim 1 is patentable over Richardson and DSL Evolution, alone or in combination, for at least these reasons and respectfully request the allowance thereof.

Claim 41

The Office Action rejects Claim 41 under the same rationale as Claim 1. Applicants respectfully submit that Claim 41, as amended, is patentable over Richardson and DSL Evolution for at least similar reasons to those discussed above regarding Claim 1. For example, as discussed above regarding Claim 1, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "means for requesting a desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one Application Programming Interface (API) call responsive to the received request for a videoconference," as recited in Claim 41.

Additionally, Claim 41 is amended to include recitations corresponding to dependent Claim 44, which is canceled herein. In rejecting Claim 44, the Office Action states "please see (Richardson: section 0157, 0195-0199; DSL Evolution: Section 4.2.1.2, page 11; Section 7.1, page 35)." (Office Action, page 12.) Applicants respectfully submit that the cited portions of Richardson and DSL Evolution do not disclose or suggest "means for authenticating the ASP with the RAN," recited in Claim 41, as amended. In fact, DSL Evolution appears to teach away from the above recited portion of Claim 41, as amended. For example, regarding the policy based profiles, DSL Evolution states "[n]o single ASP authenticates the ASP access session, so a profile for that session is put together by the Policy Repository and is based on various subscriptions associated with that access session." (DSL Evolution, Section 5.3.2, page 32.) In this regard, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "means for authenticating the ASP with the RAN," recited in Claim 41, as amended. Accordingly, Applicants respectfully request the allowance of Claim 41.

Claims 33 and 47

Applicants respectfully submit that Claim 33 is patentable for at least the reason that Richardson and DSL Evolution, alone or in combination, do not disclose or suggest several of the recitations therein. In rejecting Claim 33, the Office Action states, in part, that Richardson discloses "establishing, by the RAN, a control signal application flow, a video application flow, and an audio application flow for the identified participants (section 0067-0068; 0142-0147; 0153; 0205-0206)." (Office Action, page 9.) Applicants respectfully submit that the cited portions do not disclose or suggest that the RAN establishes "a control signal application flow, a video application flow and an audio application flow for each of the identified participants," as recited in Claim 33. Instead, the cited portions of Richardson describe that the server-client provide for resolution and/or frame rate adjustment. (See, e.g., Richardson, paragraphs 0142 and 0205.) For example, Richardson describes that "the present invention provides a messaging system that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference session controlling client or network equipment." (Richardson, paragraph 0205.) Additionally, paragraphs 0067-0068 appear to describe a network architecture database that may be used by a videoconference server to "effectively manage the bandwidth

and quality of service." (Richardson, paragraph 0067.) Further, paragraph 0153 of Richardson describes that the "client application is responsible for interacting with a user, exchanging of multimedia content with other client applications, and for managing calls with the server application." Yet further, paragraphs 0142-0147 of Richardson do not appear to address any involvement with the RAN and instead appear to be directed to server-client messages.

The Office Action further states DSL Evolution discloses the above claim recitation at Section 5.3.1-5.3.2.3, pages 28-34. (Office Action, page 10.) Applicants respectfully submit that, in contrast with the Office Action allegation, DSL Evolution describes a QoS architecture including two phases of QoS mechanisms. (DSL Evolution, Section 5.3, page 28.) Neither of the QoS mechanisms described in the cited portions of DSL Evolution disclose or suggest that the RAN establishes a control signal flow, a video application flow and an audio application flow. Moreover, DSL Evolution states that "[e]nd-to-end QoS admission control is not required in this phase. Admission control for access network QoS (bandwidth on demand) is required." (DSL Evolution, Section 5.3.2.3, page 34.) In this regard, the RAN as described in the cited portions does not appear to establish the various flows for each of the identified participants, as recited in the claim. Accordingly, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "establishing, by the RAN, a control signal application flow, a video application flow and an audio application flow for each of the identified participants," as recited in Claim 33. For at least these reasons, Applicants respectfully request that the rejection of Claim 33 be withdrawn.

The Office Action rejects Claim 47 under the same rationale as Claim 33. Applicants respectfully submit that Claim 47 is patentable over Richardson and DSL Evolution, alone or in combination, for at least similar reasons to those discussed above regarding Claim 33. Accordingly, Applicants respectfully request the allowance of Claim 47.

Dependent Claims 3-32, 34-40, 42, 43, 45, 46 and 48-51 are patentable

Applicants submit that dependent Claims 3-32, 34-40, 42, 43, 45, 46 and 48-51 are patentable over Richardson and DSL Evolution at least by virtue of the patentability of independent Claims 1, 33, 41 and 47, respectively. In addition, various ones of the dependent claims are separately patentable. For example, dependent Claim 4 further recites that:

the method further comprises receiving confirmation of the request for a desired QoS and/or bandwidth allocation from the RAN and wherein requesting a desired QoS and/or bandwidth allocation comprises *transmitting a modify* QoS and/or bandwidth allocation message including updated QoS and/or bandwidth allocation information for the videoconference for the plurality of participants *from the ASP*. (*Emphasis added.*)

The Office Action cites Richardson at paragraphs 0205-0206 and 0211-0212 and DSL Evolution at Section 2.2, pages 2-4 and Sections 5.1-5.1.1, pages 26-27 as teaching the recitations of Claim 4. Applicants respectfully submit that, in contrast with the recitations of Claim 4, the cited portions of Richardson appear to describe that the clients request modifications from the server. For example, Richardson, at paragraph 0211 describes "the message "MSG-_WINDOW_SWITCH" is sent from a client (e.g., session controller) to the server 205." Accordingly, Richardson does not disclose or suggest "receiving confirmation of the request for a desired QoS and/or bandwidth allocation from the RAN" or "transmitting a modify...from the ASP," as recited in Claim 4.

The cited portions of DSL Evolution appear to be wholly silent as to "transmitting a modify QoS and/or bandwidth allocation message...from the ASP," as recited in Claim 4. For at least these reasons, dependent Claim 4 is separately patentable over Richardson and DSL Evolution, alone or in combination. Accordingly, Applicants respectfully request the allowance of dependent Claim 4.

Regarding dependent Claim 7, the Office Action refers to paragraph 0205 of Richardson. Applicants respectfully submit that Claim 7 recites, in part "after activating the videoconference: deactivating the videoconference for the plurality of participants; and notifying the RAN that the desired QoS and/or bandwidth allocation for the videoconference is no longer desired." Applicants respectfully submit that paragraph 0205 of Richardson is devoid of any reference related to the recitations of Claim 7. For example, Richardson at paragraph 205, appears to describe "a messaging system that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference session controlling client or network equipment." Accordingly, Claim 7 is separately patentable over Richardson and DSL Evolution, alone or in combination. If the Examiner maintains this rejection, Applicants respectfully request that a subsequent rejection include, with specificity, which portion of paragraph 0205 provides the teachings related to the recitations of Claim 7 that are relied upon in the rejection.

Additionally, dependent Claim 9 depends from Claim 7 and is thus separately patentable for at least the same reasons.

Regarding dependent Claim 10, the Office Action refers to paragraphs 0063; 0065; 0138; 0164-0166; 0186; 0207 of Richardson and Section 4.2.7.2 at page 24 of DSL Evolution. Applicants respectfully submit that Claim 10 recites, in part:

wherein the videoconference has an associated application flow for video and an associated application flow for audio and wherein requesting a desired QoS and/or bandwidth allocation comprises *requesting a different desired QoS and/or bandwidth allocation for the video application flow and the audio application flow.* (Emphasis added.)

In contrast with the Office Action allegation, the cited portions of Richardson do not disclose or suggest "requesting a different desired QoS and/or bandwidth allocation for the video application flow and the audio application flow," as recited in Claim 10. The cited portions of Richardson appear to merely discuss different codecs for video and audio layering and synchronizing, but do not appear to discuss the recitations of Claim 10. The cited portions of DSL Evolution appear to describe a list of capabilities corresponding to a routing gateway. For at least these reasons, Claim 10 is separately patentable over Richardson and DSL Evolution, alone or in combination. If the Examiner maintains this rejection, Applicants respectfully request that a subsequent rejection include, with specificity, which of the cited portions provide the teachings related to the recitations of Claim 10 that are relied upon in the rejection. Additionally, dependent Claims 11-29 depend from Claim 10 and are thus separately patentable for at least the same reasons.

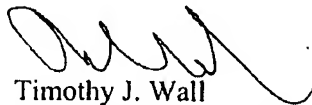
Applicants respectfully submit that the above discussed dependent claims are merely representative of all of the dependent claims and that numerous other of the dependent claims are separately patentable as well. Applicants will refrain from discussing independent patentability regarding other of the dependent claims in the interest of brevity, but reserve the right to do so in future communications if necessary.

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Filed: January 13, 2004
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Conclusion

As all of the claims are now in condition for allowance, Applicants respectfully request allowance of the claims and passing of the application to issue in due course. Applicants urge the Examiner to contact Applicants' undersigned representative at (919) 854-1400 to resolve any remaining formal issues.

Respectfully submitted,

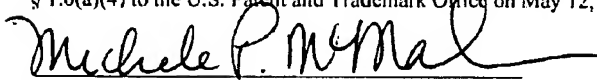


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